



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: C4 CHAIN LUBE FL 12X0.400L US CAN

Product code: 103246

1.2. Relevant identified uses of the substance or mixture and uses advised against

Motorcycle chain lubricant

1.3. Details of the supplier of the safety data sheet

Registered company name: MOTUL.

Address: Chemin du Corps de Garde. 77360. VAIRES SUR MARNE. FRANCE.

Telephone: 33.1.64.72.86.00. Fax: 33.1.64.72.86.25.

Email: motul_hse@motul.fr

1.4. Emergency telephone number : +44 (0) 1235 239 670.

Association/Organisation: .

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Extremely flammable.

Repeated exposure may cause skin dryness or cracking.

Vapors may cause drowsiness and dizziness.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Mixture for aerosol application.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Hazard symbols:



Extremely flammable

Risk phrase:

R 52/53

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 12

Extremely flammable.

R 67

Vapours may cause drowsiness and dizziness.

R 66

Repeated exposure may cause skin dryness or cracking.

Safety phrase:

S 16

Keep away from sources of ignition - No smoking.

S 2

Keep out of the reach of children.

S 46

If swallowed, seek medical advice immediately and show this container or label.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

S 51

Use only in well-ventilated areas.

S 29

Do not empty into drains.

S 23

do not breathe vapour

Apply with shorts sprays, no prolonged spraying

Do not use for any purpose other than the one for which it is intended

2.3. Other hazards

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

No substances fulfil the criteria set forth in annexe II section A of the REACH regulation (EC) n° 1907/2006.

3.2. Mixtures**Composition :**

Identification	Name	Classification	%
INDEX: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7	BUTANE	GHS02, GHS04, Dgr F+ H:220 R: 12 NOTA: C	25 <= x % < 50
INDEX: 601-006-00-1 CAS: 109-66-0 EC: 203-692-4	PENTANE	GHS02, GHS08, GHS07, GHS09, Dgr Xn,N,F+ H:225-304-336-411 EUH:066 R: 12-65-66-67-51/53 NOTA: C	10 <= x % < 25
CAS: 64742-48-9 EC: 265-150-3	NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	GHS07, GHS08, Dgr Xn H:304-336 EUH:066 R: 10-65-66-67	10 <= x % < 25
INDEX: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9	PROPANE	GHS02, GHS04, Dgr F+ H:220 R: 12	2.5 <= x % < 10
INDEX: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2	AND ISOBUTANE	GHS02, GHS04, Dgr F+ H:220 R: 12 NOTA: C	1 <= x % < 2.5

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of exposure by inhalation:**

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

Apply resuscitation techniques. Prolonged clinical monitoring may be necessary.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital

In the event of swallowing:

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet
- water

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

Spilled product may make surfaces slippery.

For non fire-fighters

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For fire-fighters

Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Avoid contact with eyes.

Take precautionary measures against static discharges.

Spray in short bursts, without prolonged spraying.

Follow standard health and safety rules on account of flammability.

Do not breathe vapours

No smoking.

Shake before use

Fire prevention:

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.

Prevent the accumulation of electrostatic charges with connections to earth

The mixture can become electrostatically charged: always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Vapours may be harmful in case of combustion.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations

Do not breathe in aerosols.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises

Packages which have been opened must be reclosed carefully and stored in an upright position

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

Never open the packages under pressure

Avoid high temperatures

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children

Keep the container tightly closed in a dry place.

Keep the container tightly closed in a dry, well-ventilated place

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Packaging

Always keep in packaging made of an identical material to the original

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3:	VME-ppm:	VLE-mg/m3:	VLE-ppm:	Notes:
109-66-0	3000	1000	-	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
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106-97-8	1000 ppm	-	-	-	-
109-66-0	600 ppm	-	-	-	-
74-98-6	1000 ppm	-	-	-	-
75-28-5	1000 ppm	-	-	-	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010):

CAS	VME:	VME:	Excess	Notes	
106-97-8	1000 ml/m3	2400 mg/m3	4(II)	DFG	
109-66-0	1000 ml/m3	3000 mg/m3	2(II)	DFG	
74-98-6	1000 ml/m3	1800 mg/m3	4(II)	DFG	
75-28-5	1000 ml/m3	2400 mg/m3	4(II)	DFG	

- France (INRS - ED984:2007 and French Order of 30/06/2004):

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No.:
106-97-8	800	1900	-	-	-	-
109-66-0	1000	3000	-	-	-	84

8.2. Exposure controls

Suitable technical inspections

Personnel shall wear regularly laundered overalls.

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVA (Polyvinyl alcohol)

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing vapours

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask:

Wear a disposable half-mask aerosol filter in accordance with standard EN149.

Category:

- FFP1

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387:

- A1 (Brown)

Particle filter according to standard EN143:

- P1 (White)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state:	fluid liquid
	spray

Important health, safety and environmental information:

pH of the substance or preparation:	not relevant.
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The pH is impossible to measure or its value is not relevant.

Boiling point/boiling range:	35 °C.
Flash point interval:	not relevant.
Vapour pressure:	Below 110 kPa (1.10 bar).
Density:	< 1
Water solubility:	Insoluble.
Self-ignition temperature:	400 °C.

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid:

- heating
- heat
- humidity
- accumulation of electrostatic charges.
- flames and hot surfaces

10.5. Incompatible materials

Keep away from:

- water
- strong oxidising agents
- strong acids

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Splashes in the eyes may cause irritation and reversible damage

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

Mixture

No toxicological data available for the mixture.

SECTION 12: ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

Substances

No aquatic toxicity data available for the substances.

Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

The product is insoluble in water and will spread on the surface

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK):

WGK 2 (VwVwS vom 27/07/2005, KBws): Hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2001/573/EC, Directive 2006/12/EEC, Directive 94/31/EEC on hazardous waste) :

14 06 03 * other solvents and solvent mixtures

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2011 - IMDG 2010 - ICAO/IATA 2011).

- Classification:



UN1950=AEROSOLS, flammable

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			

	2.1	SP63	-	SP277	F-D,S-U	63 190 277 327 959	E0		
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	203	75 kg	203	150 kg	A145 A167	E0
	2.1	-	-	Y203	30 kg G	-	-	A145 A167	E0

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Particular provisions:**

No data available.

- German regulations concerning the classification of hazards for water (WGK):

Germany: WGK 2 (VwVwS vom 27/07/2005, KBws)

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Title for H, EUH and R indications mentioned in section 3:

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
R 10	Flammable.
R 12	Extremely flammable.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 65	Harmful: may cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefährdungsklasse (Water Hazard Class).